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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/044,191	<b>Applicant(s)</b> KHUC, MINH DUY	
	<b>Examiner</b> Kwang B. Yao	<b>Art Unit</b> 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/10/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-75 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,470,008. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application's claims merely broaden the scope of the patented claims by not claiming some elements.

The following is the comparison between the patented claims and the claims in the instant application. U.S. Patent No. 6,470,008 claims the following limitations: 1. A method of operating a routing server to facilitate telephone communications over an internet to a service operation comprised of a first call center and a second call center, the method comprising: receiving a first query from an internet gateway for a first telephone call to a telephone number; processing the telephone number from the first query based on a routing table to select a first internet address for the first call center; generating a first response indicating the first internet address; transferring the first response to the internet gateway, wherein the internet gateway transfers the first telephone call over the internet to the first call center using the first internet address in response to the first response; receiving, routing instructions from the service operation, and in response, dynamically altering the routing table based on the routing instructions; after altering the routing table, receiving a second query from the internet gateway for a second telephone call to the telephone number; processing the telephone number from the second query based on the altered routing table to select a second internet address for the second call center; generating a second response indicating, the second internet address; and transferring the second response to the internet gateway, wherein the internet gateway transfers the second telephone call over the internet to the second call center using the second internet address in response to the second response. 2. The method of claim 1 further comprising processing the telephone number to select a backup internet address for the first internet address and generating the first response to indicate the backup internet address. 3. The method of claim 1 further comprising processing the telephone number to select the first internet address based on a spoken language available at the first call center. 4. The method of claim 1 wherein the routing server

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receives the first and second queries over the internet and transfers the first and second responses over the internet. 5. The method of claim 1 wherein the service operation operates at least one of a: product ordering system, calling card system, reservation system, and customer service system. 6. A method of operating a routing server to facilitate telephone communications over an internet to a service operation comprised of a first call center and a second call center, the method comprising: receiving a first query from an internet gateway for a first telephone call to a telephone number; processing the telephone number from the first query to generate and transfer a second query to the service operation; receiving a first response to the second query from the service operation indicating a first internet address for the first call center; generating a second response indicating the first internet address; transferring the second response to the internet gateway, wherein the internet gateway transfers the first telephone call over the internet to the first call center using the first internet address in response to the second response; receiving a third query from the internet gateway for a second telephone call to the telephone number; processing the telephone number from the third query to generate and transfer a fourth query to the service operation; receiving a third response to the fourth query from the service operation indicating a second internet address for the second call center; generating a fourth response indicating the second internet address; and transferring the fourth response to the internet gateway, wherein the internet gateway transfers the second telephone call over the internet to the second call center using the second internet address in response to the fourth response. 7. The method of claim 6 wherein the routing server receives the first and third queries and the first and third responses over the internet, and wherein the routing server transfers the second and the fourth queries and the second and fourth responses over the internet. 8. The method of claim 6.

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wherein the service operation operates at least one of a: product ordering system, calling card system, reservation system, and customer service system. 9. A method of operating a routing server to facilitate telephone communications over an internet to a call center, the method comprising: receiving a first query from a first internet gateway for a telephone call to a first telephone number; processing the first telephone number from the first query to select a first internet address for the call center; generating a first response indicating the first internet address; transferring the first response to the first internet gateway, wherein the first internet gateway transfers the telephone call over the internet to the call center using the first internet address in response to the first response; receiving a second query from the call center for the telephone call; processing a second telephone number from the second query to select a second internet address for a second internet gateway; generating a second response indicating the second internet address; and transferring the second response to the call center, wherein the call center transfers the telephone call over the internet to the second internet gateway using the second internet address in response to the second response. 10. The method of claim 9 wherein the routing server receives the first and second queries over the internet and transfers the first and second responses over the internet. 11. The method of claim 9 wherein the service operation operates a calling card system.

The instant application discloses the following limitations: 1. A method of operating a routing server to support a telephone call received by a first Internet service provider, the method comprising: receiving a query over the Internet from the first Internet service provider that includes a telephone number associated with the telephone call; processing the telephone number from the query to identify a first Internet address associated with a second Internet service

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provider; and sending a response that indicates the first Internet address over the Internet to the first Internet service provider, wherein the first Internet service provider uses the first Internet address to route the telephone call over the Internet to the second Internet service provider. 2.

The method of claim 1 further comprising generating the response that indicates the first Internet address. 3. The method of claim 1 wherein processing the telephone number comprises selecting a backup Internet address for the first Internet address and generating the response that also indicates the backup Internet address. 4. The method of claim 1 wherein the telephone call is to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 5. The method of claim 1 wherein processing the telephone number comprises processing a time of day. 6. The method of claim 1 wherein processing the telephone number comprises processing an identity of the first Internet service provider. 7. The method of claim 1 wherein processing the telephone number comprises processing an identity of the second Internet service provider. 8. The method of claim 1 wherein the telephone call includes voice communications. 9. The method of claim 1 wherein the telephone call includes facsimile communications. 10. The method of claim 1 wherein the telephone call includes modem communications. 11. The method of claim 1 wherein the telephone call includes video communications. 12. The method of claim 1 wherein the first Internet service provider comprises a communications system that includes an Internet gateway. 13. The method of claim 1 wherein the second Internet service provider comprises a communications system that includes an Internet gateway. 14. A routing system to support a telephone call received by a first Internet service provider, the routing system comprising: a communication interface configured to receive a query over the Internet from the first Internet

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service provider that includes a telephone number associated with the telephone call and configured to send a response that indicates a first Internet address over the Internet to the first Internet service: provider, wherein the first Internet service provider uses the first Internet address to route the telephone call over the Internet to the second Internet service provider; and a server connected to the communication interface and configured to process the telephone number from the query to identify the first Internet address associated with a second Internet service provider. 15. The routing system of claim 14 wherein the server is further configured to generate the response that indicates the first Internet address. 16. The routing system of claim 14 wherein the server is further configured to process the telephone number to select a backup Internet address for the first Internet address and generate the response that also indicates the; backup Internet address. 17. The routing system of claim 14 wherein the telephone call is to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 18. The routing system of claim 14 wherein the server is further configured to process process a time of day. 19. The routing system of claim 14 wherein the server is further configured to process an identity of the first Internet service provider. 20. The routing system of claim 14 wherein the server is further configured to process an identity of the second Internet service provider. 21. The routing system of claim 14 wherein the telephone call includes voice communications. 22. The routing system of claim 14 wherein the telephone call includes facsimile communications. 23. The routing system of claim 14 wherein the telephone call includes modem communications. 24. The routing system of claim 14 wherein the telephone call includes video communications. 25. The routing system of claim 14 wherein the first Internet service provider comprises a communications system that includes an



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Internet gateway. 26. The routing system of claim 14 wherein the second Internet service provider comprises a communications system that includes an Internet gateway. 27. The routing system of claim 14 wherein the communication interface comprises an Internet gateway. 28. A software product to support a telephone call received by a first Internet service provider, the software product comprising: software configured to direct a processor to receive a query over the Internet from the first Internet service provider that includes a telephone number associated with the telephone call, process the telephone number from the query to identify a first Internet address associated with a second Internet service provider, and send a response that indicates the first Internet address over the Internet to the first Internet service provider, wherein the first Internet service provider uses the first Internet address to route the telephone call over the Internet to the second Internet service provider; and a server system configured to operate the software. 29. The software product of claim 28 is further configured to direct the processor to generate the response that indicates the first Internet address. 30. The software product of claim 28 is further configured to direct the processor to select a backup Internet address for the first Internet address and generate the response that also indicates the backup Internet address. 31. The software product of claim 28 wherein the telephone call is to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 32. The software product of claim 28 is further configured to direct the processor to process a time of day. 33. The software product of claim 28 is further configured to direct the processor to process an identity of the first Internet service provider. 34. The software product of claim 28 is further configured to direct the processor to process an identity of the second Internet service provider. 35. The software product of claim 28 wherein

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the telephone call includes voice communications. 36. The software product of claim 28 wherein the telephone call includes facsimile communications. 37. The software product of claim 28 wherein the telephone call includes modem communications. 38. The software product of claim 28 wherein the telephone call includes video communications. 39. The software product of claim 28 wherein the first Internet service provider comprises a communications system that includes an Internet gateway. 40. The software product of claim 28 wherein the second Internet service provider comprises a communications system that includes an Internet gateway. 41. A method of operating a routing server to support telephone calls over the Internet between Internet service providers, the method comprising: receiving queries over the Internet, wherein the queries include telephone numbers associated with the telephone calls; processing the telephone numbers to identify Internet addresses, wherein at least some of the Internet addresses are for routing the telephone calls between different ones of the Internet service providers; and sending responses over the Internet to the Internet service providers, wherein the responses indicate the Internet addresses. 42. The method of claim 41 further comprising generating the responses that indicate the Internet addresses. 43. The method of claim 41 wherein processing the telephone numbers comprises selecting backup Internet addresses for the Internet addresses and generating the responses that also indicate the backup Internet addresses. 44. The method of claim 41 wherein some of the telephone calls are to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 45. The method of claim 41 wherein processing the telephone numbers comprises processing a time of day. 46. The method of claim 41 wherein processing the telephone numbers comprises processing identities of the Internet service providers. 47. The method of claim 41

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wherein at least some of the telephone calls include voice communications. 48. The method of claim 41 wherein at least some of the telephone calls include facsimile communications. 49. The method of claim 41 wherein at least some of the telephone calls include modem communications. 50. The method of claim 41 wherein at least some of the telephone calls include video communications. 51. The method of claim 41 wherein at least some of the Internet service providers comprise communications systems that include Internet gateways. 52. A routing system to support telephone calls over the Internet between Internet service providers, the routing system comprising: a communication interface configured to receive queries over the Internet and configured to send responses over the Internet to the Internet service providers, wherein the queries include telephone numbers associated with the telephone calls and the responses indicate Internet addresses; and a server connected to the communication interface and configured to process the telephone numbers to identify the Internet addresses, wherein at least some of the Internet addresses are for routing the telephone calls between different ones of the Internet service providers. 53. The routing system of claim 52 wherein the server is further configured to generate the responses that indicate the Internet addresses. 54 The routing system of claim 52 wherein the server is further configured to process the telephone numbers to select backup Internet addresses for the Internet addresses and generate the responses that also indicate the backup Internet addresses. 55. The routing system of claim 52 wherein some of the telephone calls are to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 56. The routing system of claim 52 wherein the server is further configured to process a time of day. 57. The routing system of claim 52 wherein the server is further configured to process identities of the Internet

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service providers. 58. The routing system of claim 52 wherein at least some of the telephone calls include voice communications. 59. The routing system of claim 52 wherein at least some of the telephone calls include include facsimile communications. 60. The routing system of claim 52 wherein at least some of the telephone calls include include modem communications. 61. The routing system of claim 52 wherein at least some of the telephone calls include include video communications. 62. The routing system of claim 52 wherein at least some of the Internet service providers comprise communications systems that include Internet gateways. 63. The routing system of claim 52 wherein the communication interface comprises an Internet gateway. 64. A software product for supporting communications for telephone calls over the Internet between Internet service providers, the software product comprising: software configured to direct a processor to receive queries over the Internet, process telephone numbers to identify Internet addresses, and send responses over the Internet to the Internet service providers, wherein the queries include the telephone numbers associated with the telephone calls, the responses indicate the Internet addresses, and at least some of the Internet addresses are for routing the telephone calls between different ones of the Internet service providers; and a server system configured to operate the software. 65. The software product of claim 64 is further configured to direct the processor to generate the responses that indicate the Internet addresses. 66. The software product of claim 64 is further configured to direct the processor to select backup Internet addresses for the Internet addresses and generate the responses that also indicate the backup Internet addresses. 67. The software product of claim 64 wherein some of the telephone calls are to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 68. The software product of

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claim 64 is further configured to direct the processor to process a time of day. 69. The software product of claim 64 is further configured to direct the processor to process identities of the Internet service providers. 70. The software product of claim 64 wherein at least some of the telephone calls include voice communications. 71. The software product of claim 64 wherein at least some of the telephone calls include facsimile communications. 72. The software product of claim 64 wherein at least some of the telephone calls include modem communications. 73. The software product of claim 64 wherein at least some of the telephone calls include video communications. 74. The software product of claim 64 wherein at least some of the Internet service providers comprise communications systems that include Internet gateways. 75. The software product of claim 64 wherein the server system comprises an Internet gateway.

As stated above, claims 1-75 of the instant application disclose all the claimed limitations of claims 1-11 of U.S. Patent No. 6,470,008, except the features of: receiving, routing instructions from the service operation, and in response, dynamically altering the routing table based on the routing instructions; after altering the routing table, receiving a second query from the internet gateway for a second telephone call to the telephone number; processing the telephone number from the second query based on the altered routing table to select a second internet address for the second call center; generating a second response indicating, the second internet address; and transferring the second response to the internet gateway, wherein the internet gateway transfers the second telephone call over the internet to the second call center using the second internet address in response to the second response.

The application's claims are nearly identical in every other respect to the patent claims. Therefore, the application's claims are simply broader version of the patented claims. It is the

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examiner's position that broadening the patented claims by not claiming the above elements of the patented claims would have been obvious to one of the ordinary skill in the art in view of the patented claims. It is important to note that the instant application is a continuation of the application which yielded the patent (U.S. Patent No. 6,470,008) used herein as the basis for the obviousness type of double patenting rejection. The application is attempting to broaden the parent application's claims by eliminating some the claimed elements in the continuation at issue here.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 6-8, 10-16, 19-21, 23-30, 33-35, 37-43, 46, 47, 49-54, 57, 58, 60-66, 69, 70, 72-75 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhao et al. (US 6,529,501).

Zhao et al. discloses a communication system comprising the following features: 1. A method of operating a routing server (Figs. 3A, 3B, 3C, 5, 6, 7, address mapping server 46) to support a telephone call received by a first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44), the method comprising: receiving a query over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) from the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44) that includes a telephone number associated with the telephone call;

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processing the telephone number from the query to identify a first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address associated with a second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52); and sending a response that indicates the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) to the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44), wherein the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44) uses the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address to route the telephone call over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) to the second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52). 2. The method of claim 1 further comprising generating the response that indicates the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address. 3. The method of claim 1 wherein processing the telephone number comprises selecting a backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address for the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address and generating the response that also indicates the backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address. 6. The method of claim 1 wherein processing the telephone number comprises processing an identity of the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44). 7. The method of claim I wherein processing the telephone number comprises processing an identity of the second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52). 8. The method of claim 1 wherein the telephone call includes voice communications. 10. The method of claim 1 wherein the telephone call includes modem (column 4, lines 27-50) communications. 11. The method of claim 1 wherein the telephone call includes video (column 4, lines 27-50) communications. 12. The method of claim I wherein the first Internet service provider (Figs. 3A,

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3B, 3C, 4, 6, 7, network access encoder 44) comprises a communications system that includes an Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66). 13. The method of claim 1 wherein the second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52) comprises a communications system that includes an Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66). 14. A routing system to support a telephone call received by a first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44), the routing system comprising: a communication interface configured to receive a query over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) from the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44) that includes a telephone number associated with the telephone call and configured to send a response that indicates a first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) to the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service: provider, wherein the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44) uses the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address to route the telephone call over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) to the second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52); and a server connected to the communication interface and configured to process the telephone number from the query to identify the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address associated with a second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52). 15. The routing system of claim 14 wherein the server is further configured to generate the response that indicates the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address. 16. The routing system of claim 14 wherein the server is further configured to process the telephone number to select a backup



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Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address for the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address and generate the response that also indicates the; backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address. 19. The routing system of claim 14 wherein the server is further configured to process an identity of the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44). 20. The routing system of claim 14 wherein the server is further configured to process an identity of the second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52). 21. The routing system of claim 14 wherein the telephone call includes voice communications. 23. The routing system of claim 14 wherein the telephone call includes modem (column 4, lines 27-50) communications. 24. The routing system of claim 14 wherein the telephone call includes video (column 4, lines 27-50) communications. 25. The routing system of claim 14 wherein the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44) comprises a communications system that includes an Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66). 26. The routing system of claim 14 wherein the second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52) comprises a communications system that includes an Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66). 27. The routing system of claim 14 wherein the communication interface comprises an Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66). 28. A software product to support a telephone call received by a first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44), the software product comprising: software configured to direct a processor to receive a query over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) from the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44) that includes a telephone number associated with the

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telephone call, process the telephone number from the query to identify a first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address associated with a second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52), and send a response that indicates the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) to the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44), wherein the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44) uses the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address to route the telephone call over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) to the second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52); and a server system configured to operate the software. 29. The software product of claim 28 is further configured to direct the processor to generate the response that indicates the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address. 30. The software product of claim 28 is further configured to direct the processor to select a backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address for the first Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address and generate the response that also indicates the backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) address. 33. The software product of claim 28 is further configured to direct the processor to process an identity of the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44). 34. The software product of claim 28 is further configured to direct the processor to process an identity of the second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52). 35. The software product of claim 28 wherein the telephone call includes voice communications. 37. The software product of claim 28 wherein the telephone call includes modem (column 4, lines 27-50) communications. 38. The software product of claim 28 wherein the telephone call

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includes video (column 4, lines 27-50) communications. 39. The software product of claim 28 wherein the first Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 44) comprises a communications system that includes an Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66). 40. The software product of claim 28 wherein the second Internet service provider (Figs. 3A, 3B, 3C, 4, 6, 7, network access encoder 52) comprises a communications system that includes an Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66). 41. A method of operating a routing server (Figs. 3A, 3B, 3C, 5, 6, 7, address mapping server 46) to support telephone calls over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) between Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers, the method comprising: receiving queries over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42), wherein the queries include telephone numbers associated with the telephone calls; processing the telephone numbers to identify Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses, wherein at least some of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses are for routing the telephone calls between different ones of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers; and sending responses over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) to the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers, wherein the responses indicate the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses. 42. The method of claim 41 further comprising generating the responses that indicate the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses. 43. The method of claim 41 wherein processing the telephone numbers comprises selecting backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses for the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses and generating the responses that also indicate the backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses. 46. The

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method of claim 41 wherein processing the telephone numbers comprises processing identities of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers. 47. The method of claim 41 wherein at least some of the telephone calls include voice communications. 49. The method of claim 41 wherein at least some of the telephone calls include modem (column 4, lines 27-50) communications. 50. The method of claim 41 wherein at least some of the telephone calls include video (column 4, lines 27-50) communications. 51. The method of claim 41 wherein at least some of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers comprise communications systems that include Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66)s. 52. A routing system to support telephone calls over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) between Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers, the routing system comprising: a communication interface configured to receive queries over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) and configured to send responses over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) to the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers, wherein the queries include telephone numbers associated with the telephone calls and the responses indicate Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses; and a server connected to the communication interface and configured to process the telephone numbers to identify the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses, wherein at least some of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses are for routing the telephone calls between different ones of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers. 53. The routing system of claim 52 wherein the server is further configured to generate the responses that indicate the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses. 54 The routing system of claim 52 wherein the server is further configured to

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process the telephone numbers to select backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses for the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses and generate the responses that also indicate the backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses.

57. The routing system of claim 52 wherein the server is further configured to process identities of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers. 58. The routing system of claim 52 wherein at least some of the telephone calls include voice communications. 60. The routing system of claim 52 wherein at least some of the telephone calls include include modem (column 4, lines 27-50) communications. 61. The routing system of claim 52 wherein at least some of the telephone calls include include video (column 4, lines 27-50) communications. 62. The routing system of claim 52 wherein at least some of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers comprise communications systems that include Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66)s. 63. The routing system of claim 52 wherein the communication interface comprises an Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66). 64. A software product for supporting communications for telephone calls over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) between Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers, the software product comprising: software configured to direct a processor to receive queries over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42), process telephone numbers to identify Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses, and send responses over the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) to the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers, wherein the queries include the telephone numbers associated with the telephone calls, the responses indicate the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses, and at least some of the Internet (Figs. 3A, 3B, 3C, 4,

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6, 7, Internet 42) addresses are for routing the telephone calls between different ones of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers; and a server system configured to operate the software. 65. The software product of claim 64 is further configured to direct the processor to generate the responses that indicate the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses. 66. The software product of claim 64 is further configured to direct the processor to select backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses for the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses and generate the responses that also indicate the backup Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) addresses. 69. The software product of claim 64 is further configured to direct the processor to process identities of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers. 70. The software product of claim 64 wherein at least some of the telephone calls include voice communications. 72. The software product of claim 64 wherein at least some of the telephone calls include modem (column 4, lines 27-50) communications. 73. The software product of claim 64 wherein at least some of the telephone calls include video (column 4, lines 27-50) communications. 74. The software product of claim 64 wherein at least some of the Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) service providers comprise communications systems that include Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66)s. 75. The software product of claim 64 wherein the server system comprises an Internet (Figs. 3A, 3B, 3C, 4, 6, 7, Internet 42) gateway (Fig. 4, gateway 66). See column 1-14.

***Claim Rejections - 35 USC § 103***

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 5, 9, 17, 18, 22, 31, 32, 36, 44, 45, 48, 55, 56, 59, 67, 68, 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao et al. (US 6,529,501) in view of Elliott et al. (US 6,754,181).

Zhao et al. discloses the claimed limitations above. Zhao et al. does not disclose the following features: 4. The method of claim 1 wherein the telephone call is to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 5. The method of claim 1 wherein processing the telephone number comprises processing a time of day. 9. The method of claim 1 wherein the telephone call includes facsimile communications. 17. The routing system of claim 14 wherein the telephone call is to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 18. The routing system of claim 14 wherein the server is further configured to process a time of day. 22. The routing system of claim 14 wherein the telephone call includes facsimile communications. 31. The software product of claim 28 wherein the telephone call is to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 32. The software product of claim 28 is further configured to direct the processor to process a time of day. 36. The software product of claim 28 wherein the telephone call includes facsimile communications. 44. The method of claim 41 wherein some of

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the telephone calls are to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 45. The method of claim 41 wherein processing the telephone numbers comprises processing a time of day. 48. The method of claim 41 wherein at least some of the telephone calls include facsimile communications. 55. The routing system of claim 52 wherein some of the telephone calls are to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 56. The routing system of claim 52 wherein the server is further configured to process a time of day. 59. The routing system of claim 52 wherein at least some of the telephone calls include include facsimile communications. 66. The software product of claim 64 is further configured to direct the processor to select backup Internet addresses for the Internet addresses and generate the responses that also indicate the backup Internet addresses. 67. The software product of claim 64 wherein some of the telephone calls are to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system. 71. The software product of claim 64 wherein at least some of the telephone calls include facsimile communications.

Elliott et al. discloses a communication system comprising the following features: 4. The method of claim 1 wherein the telephone call is to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system (Fig. 10A, call center). 5. The method of claim I wherein processing the telephone number comprises processing a time of day (column 15, lines 25-31). 9. The method of claim 1 wherein the telephone call includes facsimile (Fig. 19F, FAX 1981) communications. 17. The



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routing system of claim 14 wherein the telephone call is to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system (Fig. 10A, call center). 18. The routing system of claim 14 wherein the server is further configured to process process a time of day (column 15, lines 25-31). 22. The routing system of claim 14 wherein the telephone call includes facsimile (Fig. 19F, FAX 1981) communications. 31. The software product of claim 28 wherein the telephone call is to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system (Fig. 10A, call center). 32. The software product of claim 28 is further configured to direct the processor to process a time of day (column 15, lines 25-31). 36. The software product of claim 28 wherein the telephone call includes facsimile (Fig. 19F, FAX 1981) communications. 44. The method of claim 41 wherein some of the telephone calls are to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system (Fig. 10A, call center). 45. The method of claim 41 wherein processing the telephone numbers comprises processing a time of day (column 15, lines 25-31). 48. The method of claim 41 wherein at least some of the telephone calls include facsimile (Fig. 19F, FAX 1981) communications. 55. The routing system of claim 52 wherein some of the telephone calls are to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system (Fig. 10A, call center). 56. The routing system of claim 52 wherein the server is further configured to process a time of day (column 15, lines 25-31). 59. The routing system of claim 52 wherein at least some of the telephone calls include include facsimile (Fig. 19F, FAX 1981) communications. 66. The software product of claim 64 is

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further configured to direct the processor to select backup Internet addresses for the Internet addresses and generate the responses that also indicate the backup Internet addresses. 67. The software product of claim 64 wherein some of the telephone calls are to a service operation that includes at least one of a product ordering system, a calling card system, a reservation system, and a customer service system (Fig. 10A, call center). 71. The software product of claim 64 wherein at least some of the telephone calls include facsimile (Fig. 19F, FAX 1981) communications. See column 1-478. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Zhao et al., by using the features, as taught by Elliott et al., in order to provide an efficient data communication by allowing the operator of the telephone system to maintain quality and routing selection. See Elliott et al., column 1, lines 38-40.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Petras et al. (US 6,215,784) discloses a system for voice call completion.

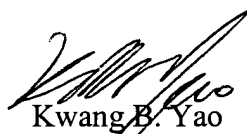
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 571-272-3182. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**KWANG BIN YAO**  
**PRIMARY EXAMINER**



Kwang B. Yao  
September 9, 2005